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Ref: 8EPR-N

Mr. John Cater
Division Administrator
Federal Highways Administration
12300 West Dakota Avenue, Suite 180
Lakewood, CO 80228

Mr. Don Hunt
Executive Director
Colorado Department of Transportation
4201 E. Arkansas Avenue
Denver, CO 80222

Re: I-70 East Supplemental Draft
Environmental Impact Statement
CEQ # 20140241

Dear Mr. Cater and Mr. Hunt:

The U.S. Environmental Protection Agency Region 8 has reviewed the I-70 East Supplemental Draft Environmental Impact Statement (EIS) and Section 4(f) Evaluation prepared by the Federal Highway Administration (FHWA) and the Colorado Department of Transportation (CDOT). Our comments are provided for your consideration pursuant to our responsibilities and authority under Section 102(2)(C) of the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4332(2)(C), and Section 309 of the Clean Air Act, 42 U.S.C. Section 7609.

Based on the EPA's procedures for evaluating potential environmental impacts on proposed actions and the adequacy of the information present, the EPA is rating the preliminary preferred alternative an EC-2 (Environmental Concerns - Insufficient Information). This letter documents the EPA's concerns and recommendations for the Final EIS. A full description of the EPA's rating system can be found at www.epa.gov/compliance/nepa/comments/ratings.html.

PROJECT BACKGROUND AND DESCRIPTION

The I-70 East project began in 2003 as a combination highway/transit improvements project for I-70 from I-25 east to Tower Road. The two components were separated in 2006 and an EIS for the transit elements was completed in 2009. The current EIS process analyzes the highway improvements project. The highway corridor traverses neighborhoods within Denver, Commerce City and Aurora. The purpose of the project is to improve safety, access and mobility and to address congestion along this major

transportation corridor. A Draft EIS was published in 2008 but was not finalized, and based on stakeholder input, the FHWA and CDOT decided to prepare a Supplemental Draft EIS. Subsequently, the lead agencies began a year-long collaborative process called the Preferred Alternative Collaborative Team, involving governmental agencies, advocacy groups, and neighborhood representatives from Adams County, Aurora, Commerce City and Denver. Using input from the Collaborative Team, the FHWA and CDOT developed a new alternative, known as the Partial Cover Lowered Alternative.

This Supplemental Draft EIS analyzes two build alternatives: (1) the Revised Viaduct Alternative with North and South Options and (2) the Partial Cover Lowered Alternative, as well as the No Action Alternative. Both build alternatives will widen the highway from Brighton Boulevard to Tower Road from six to twelve lanes along the corridor. The total number of lanes in both directions heading east will be six lanes from I-25 to Washington Street, eight lanes to Brighton Boulevard, ten lanes to I-270, twelve lanes to I-225, ten lanes to Chambers Road, eight lanes to Airport Road and six lanes to Tower Road. The build alternatives include managed and general purpose lanes operational options. The Revised Viaduct Alternative replaces the existing I-70 viaduct between Brighton Boulevard and Colorado Boulevard. The Partial Cover Lowered Alternative removes the existing I-70 viaduct between Brighton Boulevard and Colorado Boulevard and lowers the highway in this section below grade to a maximum depth of approximately 40 feet. The Partial Cover Lowered Alternative also considers at-grade connectivity options within the below-grade section – a 900-foot-long, landscaped cover area between the Clayton Street and Columbine Street bridges adjacent to Swansea Elementary School, called the Basic Option, and the Modified Option that adds another cover over I-70 between St. Paul Street and Cook Street.

The FHWA and CDOT have identified the Partial Cover Lowered Alternative with Managed Lanes as their preliminary preferred alternative. Phasing and timing will be determined during final design.

ALTERNATIVES SCREENING PROCESS

The Supplemental Draft EIS (Chapters 1 and 3) and the attachments (C – Alternatives Analysis Technical Report and D – Community Outreach and Agency Involvement) document the agencies' thorough alternatives screening process. The EPA believes that the process was transparent and inclusive and provides a solid basis for the determination of the alternatives that were analyzed in depth in this document.

ENVIRONMENTAL CONCERNS

The EPA is a cooperating agency for the I-70 East project. We appreciate that the FHWA and CDOT have addressed many of our concerns regarding air quality, environmental justice and water quality in the Supplemental Draft EIS. We are satisfied that the Supplemental Draft EIS takes a reasoned approach to assessing the potential for impacts to water quality. Our remaining comments and concerns regarding air quality and environmental justice are included below and in our attached detailed comments.

Air Quality

The EPA appreciates the amount of additional detailed information and data that were provided in the Supplemental Draft EIS, specifically in the following areas: (1) the inclusion of additional, recent ambient monitoring data for the National Ambient Air Quality Standards (NAAQS); (2) updated criteria pollutant emission inventories with interim years; (3) discussion of the potential year of maximum emissions; (4) the use of EPA's MOVES2010b motor vehicle emissions model; (5) the quantitative hot-

spot modeling for carbon monoxide and for the two areas of concern for PM_{10} hot-spot modeling; (6) the use of the updated base year of 2010; and (7) the specific mobile source air toxics emission inventories that were developed for the Supplemental Draft EIS and in Attachment J. We also commend the FHWA and CDOT for committing to provide the Swansea Elementary School with a new heating, ventilation and air conditioning system, doors and windows to reduce dust and noise impacts during construction, and to conduct air quality monitoring in the area during construction to evaluate the effectiveness of the mitigation measures used to decrease impacts.

The Supplemental Draft EIS air quality hot-spot modeling analyses show that the preliminary preferred alternative will comply with both the carbon monoxide (CO) and particulate matter (PM_{10}) NAAQS. Our attached detailed comments include recommendations for refining the air quality analysis for the Final EIS with newly available tools and information. These recommendations will increase the accuracy of the model predictions and the level of confidence in the impact assessment.

Environmental Justice

Six neighborhoods – Globeville, Elyria and Swansea, Northeast Park Hill, Montbello, Gateway and Aurora – in the project study area have higher minority populations than the minority population overall in Denver and Adams Counties. Four of these neighborhoods – Globeville, Elyria and Swansea, Northeast Park Hill and Aurora – exceed the county average of low-income households. Thus, environmental justice is a major focus for this project. The EPA commends FHWA and CDOT for the extensive community outreach program that the agencies have undertaken over the years. These public involvement efforts have included monthly community meetings, door-to-door visits, a project office located in the Elyria and Swansea neighborhood, and translators at every public event. The EPA also appreciates the transportation agencies' mitigation efforts, particularly the relocation and displacement mitigation that could include use of the Last Resort Housing process, allowing replacement housing payments that exceed the statutory maximum amount. In addition, we believe that the agencies have done a good job characterizing the population changes in the project area from 2008 to 2014. We do recommend that the Final EIS identify the organization that will be responsible for maintaining the proposed highway cover adjacent to the Swansea Elementary School.

Thank you for the opportunity to provide comments on the I-70 East Supplemental Draft EIS. If you have any questions or would like to discuss our comments, please contact me at 303-312-6704 or the lead reviewer of this project, Carol Anderson, at 303-312-6058.

Sincerely,

Philip S. Strobel
Acting Director, NEPA Compliance and Review Program
Office of Ecosystems Protection and Remediation

Attachment: Detailed Comments

cc by email: Chris Horn, FHWA
Kirk Webb, CDOT

I-70 EAST Supplemental Draft EIS
EPA DETAILED COMMENTS

Air Quality

1.) Page 5.10-4, first paragraph: The EPA appreciates that CDOT will be providing additional information to the Denver Department of Environmental Health (DDEH) to use in updating DDEH's "Good Neighbor" study. The Supplemental Draft EIS states, "This study will provide a cumulative assessment of emissions from point and mobile sources, as well as ambient MSAT concentrations in the area." The EPA recommends that relevant information from this updated study be incorporated into the Final EIS, as appropriate, especially regarding mobile source air toxics (MSATs).

2.) Page 5.10-10, "Transportation conformity": The Supplemental Draft EIS states, "Because this is the Supplemental Draft EIS, the purpose of this EIS is not to determine regional or project level conformity." The EPA agrees that the demonstration of project level conformity is not needed at this stage. The final preferred alternative needs to be selected and its evaluation for a conformity determination, as stated in the last sentence of this paragraph, will then be included in the Final EIS. However, we do note that the transportation conformity project-level, hot-spot analyses, both for carbon monoxide (CO) and particulate matter (PM_{10}), provide detailed information regarding projected air quality impacts for the identified alternatives. The analyses also project each alternative's ability to meet or not meet the relevant National Ambient Air Quality Standards (NAAQS). This is especially true in consideration of the results in Exhibit 5.10-12 on page 5.10-31. These exhibits provide modeled results that show that only the No Action and Partial Cover Lowered Alternative (PCLA) Managed Lanes Basic Option alternatives are able to meet the 24-hour PM_{10} NAAQS for the portion of the project evaluated for the I-25/I-70 PM_{10} hot-spot modeling. The EPA offers recommendations below to refine the air quality analysis for the Final EIS.

3.) Page 5.10-18, first paragraph: We note the reference to the current version of EPA's "Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas" issued in November 2013 and referenced as EPA-420-B-13-053. This version supersedes and replaces prior versions. We recommend that this version of our PM hot-spot guidance be reviewed to determine if any changes to the PM_{10} hot-spot analyses for the Final EIS need to be made. Also, please check throughout the Supplemental Draft EIS and Attachment J for references to the prior version of the guidance document (EPA-420-B-10-040) and change to EPA-420-B-13-053.

4.) Page 5.10-20, "Model selection": The document states, "AERMOD can model closure of the truck stop in the corridor affected by some alternatives, and it can also model the outflow from the proposed covered portion of I-70." For the PCLA, the below-grade segment and covered segment both present specific air modeling challenges. In our review of the Supplemental Draft EIS, particularly Attachment J, the EPA did not find a description of how the AERMOD model was configured and executed in the below-grade segment or how the exiting airflow from the covered segment was modeled. It will be important that the Final EIS describe how these aspects of the hot-spot modeling were performed and how these modeling procedures

determined the PM_{10} hot-spot modeling predicted concentrations at particular receptors.

When using AERMOD to characterize emissions from below-grade sources such as the lowered roadway segment, the EPA recommends using AERMOD's "OPENPIT source option." OPENPIT is a tool specifically designed for modeling below-grade emissions sources. The addendum of the "User's Guide for the AMS/EPA Regulatory Model – AERMOD" (May 2014) provides guidance on the application of the OPENPIT option in AERMOD. Also, when using AERMOD to assess the influence of a covered roadway segment on air quality, it is acceptable to use volume sources at the end of the tunnels, with half of the emissions at each end.

5.) Page 5.10-22, "Background concentrations": We understand that the Final EIS will incorporate EPA's recently released information for estimating background PM_{10} concentrations for use in PM_{10} hot-spot modeling. This approach will improve the accuracy of the background concentration estimate in the Final EIS.

6.) Page 5.10-24, "Pollutants to analyze": We recognize and appreciate that this section in the Supplemental Draft EIS contains additional information compared to the Draft EIS and it adds important MSAT emission inventories.

7.) Page 5.10-28: All of the predicted concentrations within CO hot-spot modeling area were shown to be below the CO 8-hour NAAQS, and these results were used to project levels of CO near the Swansea Elementary School. The EPA appreciates the additional discussion in this and subsequent document sections regarding maximum concentration receptor locations and sensitive receptors, and the additional exhibit depicting the location of the maximum concentration receptors for each alternative.

8.) Pages 5.10-29 through 33 and Exhibit 5.10-12 on page 5.10-31: This section discusses how certain aspects of the AERMOD modeling were conducted and the prediction of the modeled concentrations for PM_{10}. We recommend that this section be updated in the Final EIS after addressing recommendations in comment #4 above.

9.) Page 5.10-35, Exhibit 5.10-14, "$PM_{2.5}$ emission inventories," Page 5.10-35, Exhibit 5.10-15, "PM_{10} emission inventories," Page 5.10-36, Exhibit 5.10-16, "carbon monoxide emission inventories," Page 5.10-37, Exhibit 5.10-17, "sulfur dioxide emission inventories,", page 5.10-38, Exhibit 5.10-18, "nitrogen oxides emission inventories," page 5.10-38, Exhibit 5.10-19, "volatile organic compound emission inventories," and page 5.10-39, Exhibit 5.10-20, "Combined MSAT emission inventories": We suggest adding a general discussion that indicates these estimated emissions do not reflect the air quality benefits of EPA's recently released final rule for Tier 3 fuel and vehicle standards (79 FR 23414, April 28, 2014). The Tier 3 program is part of a comprehensive approach to reducing the impacts of motor vehicles on air quality and public health. The program will reduce per-vehicle pollutant emissions in the project area. Information regarding Tier 3 is provided at EPA's website at www.epa.gov/otaq/tier3.htm. The EPA recommends including a discussion in the Final EIS regarding reduction of future emissions of NOx, VOCs, SO_2, and MSATs as a result of Tier 3.

We also note that the EPA has released an updated mobile source emissions model called MOVES2014 that incorporates the emission reductions from the referenced Tier 3 rulemaking (www.epa.gov/otaq/models/moves/index.htm). The Supplemental Draft EIS used the previous version of the model (MOVES2010b) and the EPA has no concerns with its use in this project analysis. Because MOVES2010b does not consider the benefits of the Tier 3 Rule, it likely overestimates future vehicle emissions and produces a conservative estimate of overall criteria pollutant emissions, MSAT emissions and hot-spot modeled results for this project.

10.) Pages 19 and 33, Attachment J, Air Quality Technical Report: Table 4 on page 19 presents the summary of the CAL3QHC data and sources of those data. Item number 1 indicates that the Supplemental Draft EIS used Meteorological (MET) data from the Denver International Airport (DIA) weather station. It is EPA's understanding that the Final EIS will use appropriate MET data from the prior Denver Stapleton International airport that was determined by the Colorado Department of Public Health and Environment (CDPHE) to be more relevant to the project's location. This change is expected to improve the accuracy of the modeling effort in the Final EIS.

11.) Page 61, Attachment J, Air Quality Technical Report: Table 18 contains information on times to reach CO exposure limits. Under the table heading "Exposure Limit (ppm-minutes)", the values 2251 and 102 appear. These are likely typos and the EPA recommends changing them to "225^{1}" and "10^{2}".

12.) MSATs are discussed in the Supplemental Draft EIS, Air Quality section 5.10, and in Attachment J, page 47, sections 5.2, 5.2.1 through 5.2.4. These documents provide a good discussion regarding MSATs emissions and their associated health effects. They summarize studies that have been performed and that are under development. A number of studies, in addition to those noted in Attachment J, have examined the association between living near major roads and different adverse health endpoints. Modeling and monitoring studies have confirmed that air toxics emissions from mobile sources remain drivers of overall air toxics risks. We note that the Draft Supplemental EIS includes an analysis that allows a comparison of project-wide estimated MSAT emissions across the alternatives.

FHWA's 2012 Interim MSAT Guidance is cited in Attachment J, section 5.2.1. This guidance states that "In FHWA's view, information is incomplete or unavailable to credibly predict project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives." Attachment J discusses technical shortcomings or uncertain science that prevent a more complete determination of the MSAT health impacts for the steps necessary to prepare a health risk assessment – emission inventories, dispersion modeling and human health risk analysis. The EPA has seen recent improvements in the ability to predict hot spot MSAT concentrations. See, for example, South Coast Air Quality Management District's Multiple Air Toxics Exposure Study III (the MATES III study) at www.aqmd.gov/home/library/air-quality-data-studies/health-studies/mates-iii/mates-iii-final-report. We note that for this project, there may be adequate project information, tools and data available to evaluate MSAT hotspots. As it is our understanding that the lead agencies will not be performing additional MSAT analyses for the Final EIS, we therefore recommend evaluating DDEH's updated "Good Neighbor" study if it is available in time for consideration in the Final

EIS. This study may provide more localized impact information for the MSAT impact analysis in the Final EIS. For additional information on MSATs, please see EPA's MSAT website, www.epa.gov/otaq/toxics.htm.

13.) Attachment J, Appendix D, MOVES Input Data for the CO Hotspot Analysis, Inspection and Maintenance (I/M) Program Parameters: The MOVES2010b modeling effort utilized "Test Standards ID 33," which uses the I/M240 program's final cutpoints (i.e., emission standards). Use of Test Standards ID 33 in the MOVES2010b modeling does not correctly reflect Colorado's I/M program. Colorado submitted a State Implementation Plan (SIP) revision on August 8, 2006 that requested the removal of the I/M240 program's final cutpoints from Colorado's Regulation No. 11. The EPA approved this SIP revision on December 20, 2012 (77 FR 75388). Because of this EPA-approved relaxation in the I/M240 program's cutpoints, the EPA recommends using ID 31 in place of ID 33 in the Final EIS to improve the model's consistency with the State's currently implemented I/M program.

Another consideration for Colorado's I/M program is the State's vehicle emissions remote sensing program component called Clean Screen. We recommend noting in the Final EIS that the MOVES2010b model does not have the capability to calculate emission reductions from the implementation of Colorado's Clean Screen program. The inability of MOVES2010b to model the Clean Screen program will reduce the accuracy of the results. To address this concern, we recommend that the FHWA and CDOT contact CDPHE to determine the most representative I/M program data inputs for Colorado for use in the Final EIS MOVES modeling.